

Applic. No.: 09/760,405
Amdt. Dated August 24, 2005
Reply to Office action of July 12, 2005

REMARKS/ARGUMENTS

Reconsideration of the application is requested.

Claims 1 and 4-12 remain in the application. Claim 1 has been amended.

In item 4 on page 2 of the above-identified Office Action, claims 1-9 and 11 have been rejected as being unpatentable over Suzuki (US 6,499,096 B1) in view of Kahle et al. (US 5,913,925) (hereinafter "Kahle") under 35 U.S.C. § 103(a).

The rejection has been noted and claim 1 has been amended in an effort to even more clearly define the invention of the instant application. Support for the changes is found on page 17, lines 5-12 of the specification.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 calls for, inter alia:

an instruction output selector being connected to and controlled by said process flow control unit causing said instruction output selector to read out instructions from said instruction buffers and output N instructions in parallel, said instruction output selector having a multiplexer logic and selecting in a first case one of either one instruction from a first instruction buffer

Applic. No.: 09/760,405
Amdt. Dated August 24, 2005
Reply to Office action of July 12, 2005

and one instruction from a second instruction buffer and
in a second case two instructions from one of said first
and second instruction buffers.

Suzuki discloses selecting a first instruction from a first instruction buffer and a second instruction from a second instruction buffer. Suzuki does not teach selecting two instructions from one of the first and second instructions buffers with the further constraint that the two instructions are processed in parallel. Applicant emphasizes again that Suzuki only teaches the sequential execution of two consecutive left instructions. Should a right instruction follow a left instruction, these two instructions are as well not executed in parallel but with a time-shift of at least a half cycle. This is described in column 8, lines 8-24. First the left instruction is executed and in the meantime the right instruction is swapped to the right container. In the next cycle the right instruction is executed. Suzuki does not teach outputting a process to instructions in parallel, which are selected from the same instruction buffer.

The Examiner has stated in item 20 on page 10 of the Office action that it is sufficient to show that one of the two alternatives is taught for a proper rejection. Claim 1 has been amended to clearly point out that both alternative modes are needed in the invention of the instant application.

Applic. No.: 09/760,405
Amdt. Dated August 24, 2005
Reply to Office action of July 12, 2005

Kahle teaches that in multiscalar devices additional bits may be attached to instructions in a program (see column 4, lines 6-10). These additional bits may be used to resolve register dependencies (see column 3, lines 17-18). There is no hint in Kahle that instructions from a first execution unit may be processed by a second execution unit when the second execution unit is without a load. In contrast, Kahle teaches stalling a processing unit until a release of a register (see column 3, lines 31-32). This is contrary to the concept of the invention of the instant application. A person skilled in the art would not reach the invention of the instant application even if considering Kahle in view of Suzuki.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claim 1. Claim 1 is, therefore, believed to be patentable over the art and since claims 4-11 are ultimately dependent on claim 1, they are believed to be patentable as well.

In item 16 on page 8 of the above-identified Office Action, claim 12 has been rejected as being unpatentable over Suzuki in view of Kahle and further in view of Allen, Jr. et al. (US 6,404,752) under 35 U.S.C. § 103(a).

Applic. No.: 09/760,405
Amdt. Dated August 24, 2005
Reply to Office action of July 12, 2005

As discussed above, claim 1 is believed to be patentable over the art. Since claim 12 is dependent on claim 1, it is believed to be patentable as well.

In view of the foregoing, reconsideration and allowance of claims 1 and 4-12 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate a telephone call so that, if possible, patentable language can be worked out. In the alternative, the entry of the amendment is requested as it is believed to place the application in better condition for appeal, without requiring extension of the field of search.

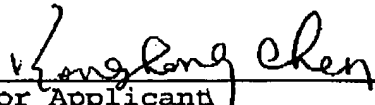
If an extension of time for this paper is required, petition for extension is herewith made. Please charge any fees which might be due with respect to 37 CFR Sections 1.16 and 1.17 to

Applic. No.: 09/760,405
Amdt. Dated August 24, 2005
Reply to Office action of July 12, 2005

the Deposit Account of Lerner and Greenberg, P.A., No. 12-
1099.

Respectfully submitted,

Yonghong Chen
Reg. No. 56,150


For Applicant

YC

August 24, 2005

Lerner and Greenberg, P.A.
Post Office Box 2480
Hollywood, FL 33022-2480
Tel: (954) 925-1100
Fax: (954) 925-1101